



10/614250

[0005] When the conventional upper and lower ball joints or tie rod ends are replaced with the [Heim] Hime Joint and the newly invented tapered insert is installed, new and unexpected results occur. The [Heim] Hime Joint, when fitted with the newly invented tapered insert provides proportionally greater vertical and or horizontal travel. This extra travel results in a dramatically improved suspension system; one that is up to eighty percent stronger and weighs less than the conventional ball joint system. Additionally the unsprung weight of the suspension system is reduced and handling is vastly improved. Friction is also greatly reduced compared to the conventional style ball joint.

Please replace paragraph [0008] with the following amended paragraph:

[0008] The [Heim] Hime Joint comprises an annular shaped socket. The socket encases a freely movable ball shaped member with an included opening in the center. The presently preferred embodiment is a two piece (upper and lower) tapered insert which is mounted and secured within the included opening of the freely movable ball shaped member of the Hime Joint. This embodiment is attached to the ball shaped member by either a bolt securing the upper and lower portions together (see Fig. 1) or a bolt passed entirely through the embodiment which is secured by a nut on the bottom (see Fig. 2). The presently preferred embodiment is the stronger and more preferable of the two although both achieve the same end result.

Please replace paragraph [0010] with the following amended paragraph:

[0010] The vehicle suspension system improvement is comprised of the following steps:

Detaching the spindle or knuckle from the upper and lower ball joints.

Detaching the upper and lower ball joints from the upper and lower suspension arms.

Installing the new embodiment into the [Heim] Hime Joint and then installing the assembled unit into the location previously occupied by the ball joint which was attached to the upper and lower suspension arm. Next the tapered lower portion of the embodiment must be installed into the upper and lower tapered included openings of the spindle or knuckle and then secured by properly installing the top portion of the same unit which holds the bottom portion in place.

Please replace paragraph [0011] with the following amended paragraph:

[0011] So installed, the greater rotational capability of the [Heim] Hime Joint when combined with the new embodiment will achieve greater vertical and horizontal travel with respect to the pivot points of the upper and lower suspension arms. Additionally it will have greater strength, reduced weight, create less friction and have a lower replacement cost than the items described in the above Description of the Prior Art. Used properly it will dramatically improve the on and off-road handling capabilities of the vehicle and vehicle suspension to which it is attached.